Factors Predicting Progression of Diabetic Retinopathy

Abstract

Diabetic retinopathy is one of the potential blinding condition affecting economically active middle aged population. **Objective:** To analyse the role of oscillatory potentials (ERG), glycaemic status and blood pressure in predicting progression of diabetic retinopathy. **Methodology:** Prospective observational study wherein, 50 patients with type II diabetes who had been diagnosed as Moderate, severe and very severe non proliferative diabetic retinopathy with or without macular edema were enrolled, baseline parameters like Fasting blood sugar, systolic and diastolic blood pressures and oscillatory potentials were documented and followed up for a period of twelve months to look for progression of retinopathy. **Results:** About 77% of patients with abnormal OP, 91% of patients with FBS ≥126 mg/dl and 72% of patients with systolic BP ≥140 progressed to next level of diabetic retinopathy with p value of 0.0001, 0.0014, 0.0026 respectively which was <0.05, meaning that it was statistically significant. **Conclusion:** To conclude, this study has demonstrated that factors like oscillatory potentials, fasting blood sugar and systolic blood pressure can predict the progression of diabetic retinopathy. With this, patients who are at greater risk for progression can be followed up closely and treated effectively.

Key words: Diabetic retinopathy, Progression, oscillatory potentials, fasting blood sugar and systolic blood pressure, proliferative diabetic retinopathy.